



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,876	03/22/2004	Gene Probasco	61842CIP(51035)	9875
21874 7590 07/27/2007 EDWARDS ANGELL PALMER & DODGE LLP P.O. BOX 55874 BOSTON, MA 02205			EXAMINER LEVY, NEIL S	
			ART UNIT 1615	PAPER NUMBER
			MAIL DATE 07/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/805,876

Applicant(s)

PROBASCO ET AL.

Examiner

NEIL LEVY

Art Unit

1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37-CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/26/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 1615

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no explanation of what constitutes liquid soap; and no examples as such, emulsifiers are seen as meeting this requirement: see LOCKE et al 5372817, column 6, lines 14-17.

Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for HOP beta acids, does not reasonably provide enablement for Beta acids in general

. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

The invention is directed to the Beta acid portion of Hop acid extraction, & is presented as naturally obtained & also recognized as GRAS. Many B acids are used in agriculture, but the instant invention is directed specifically to those extracted from hops (colupulone, lupulone, etc). However, as claimed, any acid with a beta functional group would meet the claim.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1615

Claims 1, 2, 4, 6-9, 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Confusion reigns: claims 1, 2 are emulsion and soaps. Also, "at least about" is indefinite-at least 1% excludes 0.99, but at least about permits 0.5, for example.

Claim Rejections - 35 USC § 103

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JONES et al '96 and NUTTER et al 5827895 in view of LOCK et al 5372817 or SOUTER et al U S2003/00600379.

JONES, of record, shows B acids are antifungal and acaricidal, and applies to bean leaf. However, no soap is evident, in either reference. Nutter teaches Beta acids, lupulones and analogs thereof from HOPS, are known pesticides (col. 3, lines 1-6, col. 4, line 3-34).. Aqueous alkaline solutions with emulsifiers, polyols, are provided which are dispersible in water (col. 5, line 18-33) and are useful as solution, suspension, or emulsion (line 65, 66, col. 5).

SOUTER shows liquid soaps [0018] with emulsifier [0043] is safe and effective to control spider mites [0011]. Additional pesticides are supplemented [0039]. Thus, those of JONES or NUTTER, B hop acids, would be obvious to use as GRAS pesticides, to provide a safer pesticidal means of protecting crops from mildew and mites.

LOCKE (column 2, line 48; column 3, line 5) applies safer pesticides to control fungus and insects (column 5, lines 24-26) on plants, applied as a liquid soap (column 4, bottom) with other safe insecticides and surfactants (column 5, lines 35-41) like the Tweens (column 6, lines 14-18) or tritons.

One in the art would find it obvious to provide B acids with other plant extracts of LOCKE and soaps of SOUTER, in order to provide non-target safe anti-mildew, anti-spider mite liquid compositions.

Art Unit: 1615

It would have been obvious to a person of ordinary skill in the art at the time the invention was made desiring to utilize natural compounds as pesticides, to use the Beta acids of Jones and Nutter, to control mites and aphids of crops using emulsified solutions as of JOHNSON, in order to provide a natural product- one treatment means to control mites, Aphids, and bacteria with sprayable forms emulsified as shown by Johnson.

There is no distinguishing disclosure of the instant composition as providing an unusual and/or unexpected results obtained since the prior art is well aware of the use of hops and extracts thereof as pesticides.

The selection of the instant non-critical pest control ingredients and concentrations are result effective parameters chosen to obtain the desired effects. It would be obvious to vary the concentration each ingredient to optimize the effect desired and the use of ingredients for the functionality for which they are known to be used is not a basis for patentability.

Double Patenting

Claim1,2 stand provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3, 10, 14, 15, 17, 18 of copending Application No. 11/00878

Although the conflicting claims are not identical, they are not patentably distinct from each other because The methods, steps are the same, thus any pest on a plant would be affected..

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29

Art Unit: 1615

USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Response to Arguments

Applicant's arguments filed 4/26/07 have been fully considered but they are not persuasive. Applicant's arguments are directed at the now claimed emulsion as not evident in the cited prior art. However, Nutter, previously of record in the parent case, clearly showed dispersions, solutions, & emulsions were useful forms of Hops beta acid pesticidal formulations. The references now presented teach the claimed liquid soap, not otherwise identified in this CIP, to be known as pesticidal per se & as a carrier or vehicle of synthetic chemical & natural pesticides. The liquid soap is also shown as detergent or surfactant. The use of Beta acid fractions of Hops is disclosed in the prior art, for control of the claimed acarids & mildew, with the formulations for application to crops well known by the artisan.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 1615

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

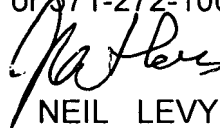
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NEIL LEVY whose telephone number is 571-272-0619. The examiner can normally be reached on Tuesday-Friday, 7 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL WOODWARD can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



NEIL LEVY
Primary Examiner
Art Unit 1615